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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,224	10/20/2003	David W. Baarman	18716.84226-001	4059

7590 09/21/2005

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EXAMINER
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VU, DAVID HUNG

ART UNIT	PAPER NUMBER
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2828

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/689,224	<b>Applicant(s)</b> BAARMAN ET AL. 	
	<b>Examiner</b> David Vu	<b>Art Unit</b> 2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 9,10 and 46-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8,11-45 and 55 is/are rejected.
- 7) ☒ Claim(s) 23-24,29,37-38,43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/13/04,12/16/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's election without traverse of claims 1-8, 11-45, and 55 in the reply filed on 7/11/05 is acknowledged.
2. Claims 9-10 and 46-54 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/11/05.

### ***Information Disclosure Statement***

3. The reference 843,534 cited on the information disclosure statement, PTO form 1449, filed on 08/12/04 is not a valid U.S. patent. Accordingly, the reference was not considered.

### ***Specification***

4. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

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granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 18-19, 30, 32-33, and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirai et al (hereinafter Hirai), U.S. Pat No 5,737,211.

Hirai discloses the claimed invention including first coil 21 at a first orientation for receiving at least one of inductively transmitted power and inductively transmitted communications; a second coil 22 arranged at a second orientation to receive at least one of inductively transmitted power and inductively transmitted communications, the first orientation being different from second orientation; and wherein the first coil and second coil are electrically connectable to an electronic device, whereby the electronic device receives at least one of power and communication from at least one of the first coil and second coil, see, for example, figures 1 and 3, column 1, lines 12-25, column 3.

Regarding claims 18-19, 32-33, figure 3 shows the coils are at 90 degrees angle, circuit means 10, and load 11.

Regarding claim 30, figure 1 shows coil 21 is in parallel with coil 22 and coil 22 is inherently in parallel with a load; thus, coils 21-22 are in parallel with the load.

7. Claims 1-7, 18-21, 25-28, 32-35, 39-42, 44-45, 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Bernstein, U.S. Pat No 5,281,941.

Bernstein discloses the claimed invention including first, second and third coils 24,26,28 at different angles (90 degrees apart) inherently for receiving at least one of inductively transmitted power and inductively transmitted communications; and wherein the coils are inherently electrically connectable to a circuit means or electronic device or

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load, whereby the electronic device receives at least one of power and communication from at least one of the coils, see, for example, figures 2-3, column 1, lines 6-10, column 2, lines 45+, column 3, lines 1-22. Figures 2-3 show the coils are wrapped around a spherical bobbin and the spools are integral with one another. The bobbin can also be considered as made up by three different bobbins.

Regarding claims 44-45, the coils can be considered as sharing a common origin and are nested within each other.

8. Claims 1-3, 18-20, 32-34, 55 are rejected under 35 U.S.C. 102(e) as being anticipated by Esser et al (hereinafter Esser), U.S. Pat No 5,814,900.

Esser discloses the claimed invention including first coil 2 at a first orientation for receiving at least one of inductively transmitted power and inductively transmitted communications; second coil 103-104 arranged at a second orientation to receive at least one of inductively transmitted power and inductively transmitted communications, the first orientation being different from second orientation; and wherein the first coil and second coil are electrically connectable to a circuit means or an electronic device or load, whereby the electronic device receives at least one of power and communication from at least one of the first coil and second coil, see, for example, figures 1-2, 8, 21, column 5, lines 40+, columns 6-7.

Regarding claims 33-34, figure 8 shows first coil 2 and second coil 104 are about 90 degrees apart. Third coil 3 has different angular orientation from first and second coils.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai in view of Shoda et al (hereinafter Shoda), U.S. Pat No 5,115,168.

Hirai as discussed from the above, essentially discloses the claimed invention but does not explicitly disclose a rectifying means. Shoda discloses rectifying means D2-D3, D5 in a power circuit (figures 2a-2b, 3a). It would have been obvious to one having ordinary skill in the art at the time of applicant's claimed invention was made to have provided the Hirai reference with the rectifying means coupled to the coils; thus, a direct current would have been supplied to the load.

11. Claims 8, 11-17, 22, 25-28, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein in view of Shoda.

Bernstein as discussed from the above essentially discloses the claimed invention but does not explicitly disclose a rectifying means. Shoda discloses rectifying means D2-D3 in a power circuit (figures 2a-2b, 3a). It would have been obvious to one having ordinary skill in the art at the time of applicant's claimed invention was made to have provided the Bernstein reference with the rectifying means coupled to the coils; thus, a direct current would have been supplied to the load.

Regarding claim 22, figures 2a-2b, 3a of the Shoda reference do show capacitors C1-C4.

12. Claims 8, 11-13, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esser in view of Shoda.

Esser as discussed from the above essentially discloses the claimed invention but does not explicitly disclose a rectifying means. Shoda discloses rectifying means D2-D3 in a power circuit (figures 2a-2b, 3a). It would have been obvious to one having ordinary skill in the art at the time of applicant's claimed invention was made to have provided the Esser reference with the rectifying means coupled to the coils; thus, a direct current would have been supplied to the load.

Regarding claim 36, figures 2a-2b, 3a of the Shoda reference do show capacitors C1-C4.

13. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai.

Hirai as discussed from the above essentially discloses the claimed invention but does not the coils are in series with the load. However, arranging the coils in series with the load is a very well known arrangement. It would have been obvious to one having ordinary skill in the art at the time of applicant's claimed invention was made to have arranged the coils in series with the load; thus, power could have been directly transferred to the load.

***Allowable Subject Matter***

14. Claims 23-24, 29, 37-38, 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patents by Tobler and Tary are cited a showing a series arrangement of the coils with an output load.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Vu whose telephone number is (571) 272-1831. The examiner can normally be reached on M-F 8am-430pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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A handwritten signature in black ink, appearing to read 'David Vu', with a long horizontal flourish extending to the right.

David Vu  
Primary Examiner  
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dv